



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,400	09/16/2004	Philippe Gambier	68.0468	5399

35204 7590 12/16/2005

SCHLUMBERGER RESERVOIR COMPLETIONS
14910 AIRLINE ROAD
ROSHARON, TX 77583

EXAMINER

FULLER, BRYAN A

ART UNIT PAPER NUMBER

3676

DATE MAILED: 12/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/711,400

Applicant(s)

GAMBIER, PHILIPPE

Examiner

Bryan A. Fuller

Art Unit

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/16/04, 9/21/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because it contains phrases which can be implied. In line 1 the applicant uses the phrase "One aspect of the present invention is." In lines 4 and 5 the applicant uses the phrase "Another aspect of the present invention is." In line 6 the applicant uses the phrase "Yet another aspect of the invention relates to." In lines 8 and 9 the applicant uses the sentence "Other aspects and features of the system and method are also described." Correction is required. See MPEP § 608.01(b).

3. The abstract of the disclosure is objected to because lines 9 – 13, which starts with, "It is emphasized ..." is an unnecessary sentence stating the abstract's alleged compliance with 37 CFR 1.72(b). Correction is required. See MPEP § 608.01(b).

Claim Objections

4. Claim 2 is objected to because of the following informalities: Claim 2 includes an acronym that needs to be spelled out. This objection could be overcome if "MEMS" was replaced with -- Micro-Electro-Mechanical Systems (MEMS) --. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 4 – 10, 12 – 16, 18 – 21, 23, and 25 - 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Willauer (6,540,019).

With respect to claims 1, 4 – 10, 12 - 16: Willauer teaches in column 1, line 35 – column 4, line 67 and in Figures 1 – 10 a packer/completion that comprises a sensor positioned therein. The sensor comprises a pressure gauge (30). The reference does not expressly say it uses a gauge. However, a pressure sensor is inherently a pressure gauge. The packer is inflatable thus it inherently comprises a setting chamber. The packer further comprises a second sensor (62 or 64) above the packer adapted to measure a characteristic external to the packer. The packer can also include a sensor that is adapted to measure a well annulus pressure.

With respect to claims 18 - 21: Willauer teaches in column 1, line 35 – column 4, line 67 and in Figures 1 – 10 a completion, comprising: a packer; a gauge above the

packer; the gauge communicating with an interior cavity of the packer. The reference further teaches a completion wherein the gauge is directly connected to the packer or wherein the gauge is positioned within the interior cavity of the packer. The reference further teaches a method for use in a well, comprising directly measuring a pressure in a setting chamber of a downhole tool with a pressure gauge.

With respect to claims 18 - 21: Willauer teaches in column 1, line 35 – column 4, line 67 and in Figures 1 – 10 a method comprising: positioning a plurality of gauges within a packer; measuring well characteristics at different positions within the well using the gauges. Willauer further teaches a method that further comprises measuring an annulus pressure with one of the gauges and measuring a setting chamber pressure within the packer with one of the gauges.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 11, 17, 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willauer in view of Delatorre et al (5,554,804).

With respect to claims 11, 17, 22 and 24: Willauer teaches the features as previously claimed except for wherein the sensor/pressure gauge is adapted to measure a tubing pressure. Delatorre et al teaches in column 2, lines 52 – 67 a method wherein the sensor/pressure gauge is adapted to measure a tubing pressure.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Willauer's invention in view of Delatorre et al, because reliability in a permanent installation type of well application is a very important consideration.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Willauer in view of Alft et al (6,577,954).

With respect to claim 2: Willauer teaches the features as previously claimed except for wherein the sensor is a MEMS sensor. Alft et al teaches in column 33, line 66 – column 34, line 55 a method wherein the sensor is a MEMS sensor. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Willauer's invention in view of Alft et al, because MEMS sensors are conventional sensors.

10. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Willauer in view of Stephenson (US 2002/0163639).


With respect to claim 3: Willauer teaches the features as previously claimed except for wherein the sensor is a nanotechnology-based sensor. Stephenson teaches in paragraph [0012] a method wherein the sensor is a nanotechnology-based sensor. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Willauer's invention in view of Stephenson, because it is desirable to have sensors that are so small they can be embedded in a substrate.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan A. Fuller whose telephone number is (571) 272-8119. The examiner can normally be reached on M - Th 7:30 - 5:00 and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian E. Glessner can be reached on (571) 272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Brian E. Glessner
Supervisory Patent Examiner
Art Unit 3676

baf